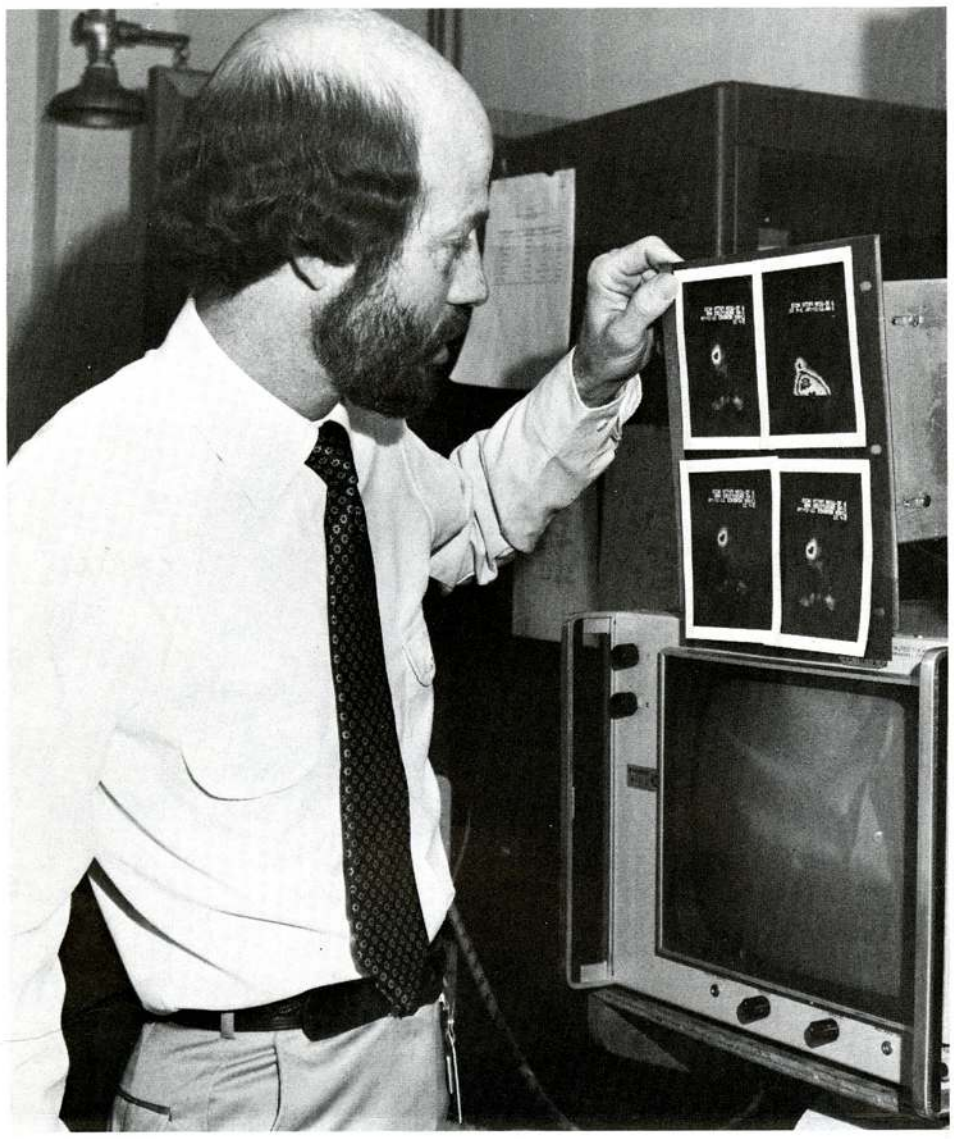
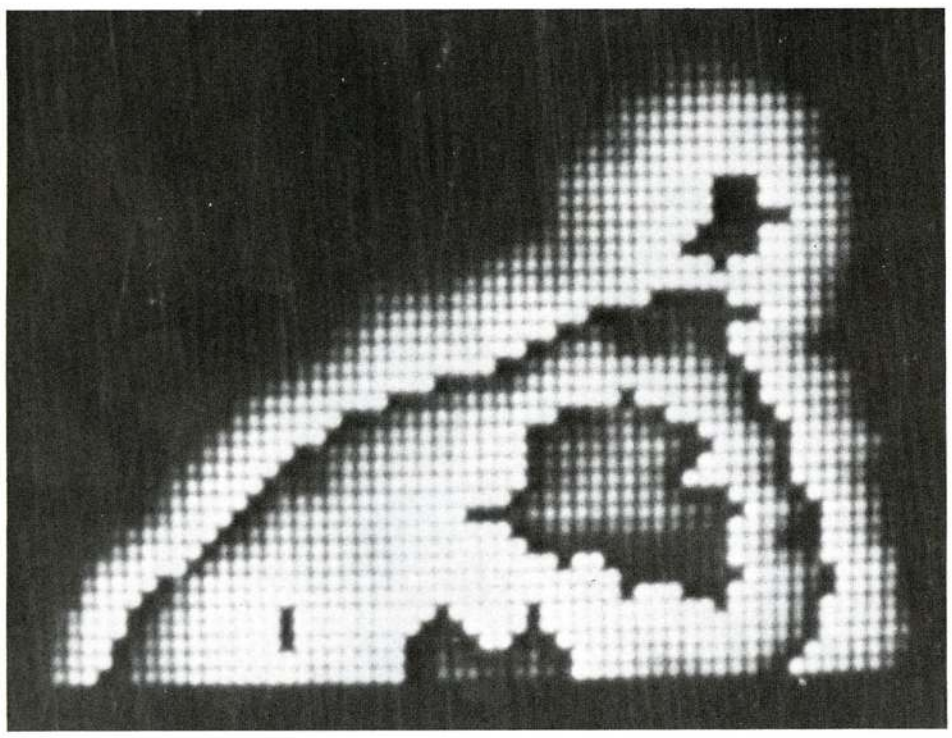
UNION CARBIDE

Nuclear Division News

Vol. 11/No. 12 • June 12, 1980



F. F. (RUSS) KNAPP, head of the nuclear medicine technology group, examines scans of organs imaged with new radiopharmaceuticals.



SCAN OF RAT HEART and liver imaged with radiolabelled compound.

New imaging agents developed at ORNL

Researchers in ORNL's Health and Safety Research Division have developed a new class of radioactive imaging agents that show promise for improved medical diagnosis of heart disease, adrenal disorders, strokes and brain tumors.

The new agents, still being tested, are radiopharmaceuticals—drugs labeled with a low-level radioactive "tag" that enables them to be detected readily in human and animal systems.

Tellurium isotope

Animal studies indicate that these radiotracers, containing an isotope of the metallic element tellurium, are superior to imaging agents currently in use.

The agents also have the favorable characteristic of being "metabolically trapped" at desired sites in the body, increasing their residence time and enhancing the resulting image. Thus, in prospective clinical applications, they would enable physicians to obtain clearer images using less radioactivity.

Radioisotopes widely used

Today, tests given to one out of every four patients hospitalized for medical diagnosis in the U.S. involve the use of radioisotopes.

Medical uses of reactor-produced radioisotopes began in 1946 with the first shipment from ORNL of carbon-14 to a cancer clinic. This program has grown in importance as new agents are found which locate preferentially in diseased tissues and as improved scanning devices increase the precision with which images can be obtained. U.S. hospitals must have nuclear medicine procedures available in order to be accredited.

Early detection and diagnosis of heart disease has been one of the major applications of imaging agents. By making it possible to visualize even subtle differences between normal and diseased heart tissue, these agents could be used to identify patients who would benefit the most from corrective procedures.

In another application of the same tellurium isotope, ORNL researchers have used it to detect and diagnose adrenal disorders.

Principal investigators in this group are Furn F. (Russ) Knapp, Kathleen R. Ambrose, Thomas A. Butler and James D. Hoeschele. Technicians in the nuclear medicine technology group include Alvin P. Callahan, Leigh Ann Ferren, John A. Roberts and Clarence E. Guyer.

Aerial survey over Oak Ridge

That low-flying helicopter over the Oak Ridge area is on official business. The crew of three is part of a routine, aerial environmental monitoring program conducted by DOE.

The aerial survey is a continuation of DOE's national program of maintaining updated radiological maps of facilities and measuring natural terrestrial radiation profiles of areas surrounding the nuclear installations. The last survey done in Oak Ridge was in November 1974.

The helicopter, flying at 250 feet above ground level, will continue its surveillance through June 25.

Surplus sale set at Paducah

A surplus sale of used government material will be held at Paducah with sealed bids to be opened at 1 p.m., June 20. Included are five forklifts; three station wagons; a van; four picks; a panel truck; two dump trucks; a truck tractor; a 33-passenger bus; six electric typewriters; nine calculators; 1800 five-pound five extinguishers; used hand tools; used tool chest and miscellaneous lots of mechanical and electrical parts and supplies.

Additional information or bid documents may be obtained from E.G. Yates, PAX 686 or Bell 282.

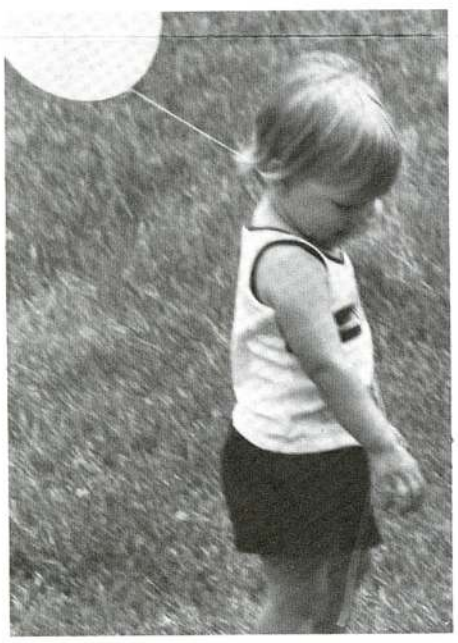
In this issue....

Paducah employees recently staged "Family Day" to allow families of employees into the plant for the first time to tour facilities. Some 4,900 attended the two-day affair. Pictures on Page 2.

Other features:

Family day—Paducah

For the first time the gates of the Paducah Plant opened for families of employees. Some 4,900 people came May 17 and 18 for Family Day. They toured special exhibits in and around Building C-100 and took a "ride-through" tour of the plant. Many came around noon and stayed to eat the barbecue lunch planned for the event. George Hall, Family Day chairman, expressed thanks for the assistance he received from everyone connected with the event. "It couldn't have been better," he said.



Griesemer director of Biology Division

Richard A. Griesemer, associate director of the Division of Cancer Cause and Prevention at the National Cancer Institute, has been named director of ORNL's Biology Division.

Griesemer was a senior medical research scientist with the Biology Division from 1973 until 1977, serving for two years as head of the division's cancer and toxicology section. He left Union Carbide to become director of the Carcinogenesis Testing Program at the National Cancer Institute, a member of the National Institutes of Health.

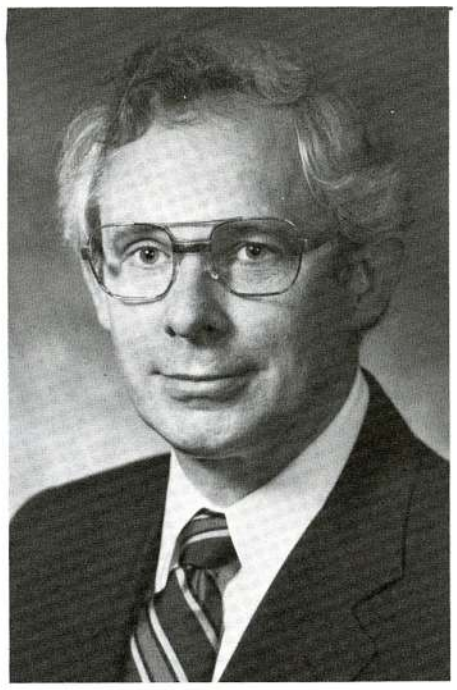
He succeeds John B. Storer, who is returning to research work in the division.

Born in Andreas, Pa., Dr. Griesemer received his PhD in veterinary pathology and the DVM from Ohio State University. From 1953 until 1971, with two years' interruption for service with the U.S. Air Force at the Armed Forces Institute of Pathology, he was associated with the Department of Veterinary Pathology at Ohio State; he was named department chairman in 1967. In 1971 he became associate director of the National Primate Research Center at the University of California at Davis.

His professional memberships include the American Association for Cancer Research, the American Association for the Advancement of Science, the International Academy of Pathology and the American Veterinary Medical Association, which in 1968 presented him with its Gaines Award and a gold medal for his research on diseases of small animals. He is a diplomate of the American College of Veterinary Pathologists.

Dr. Griesemer has been a member of a variety of scientific and advisory committees. During the past two years, he has served on five working groups set up by the International Agency for Research on Cancer to study various aspects of carcinogenesis. In 1979 he was the recipient of the NIH Director's Award.

He and his wife, Marilyn Stauf Griesemer, will make their home in Oak Ridge. They have three sons.



Richard A. Griesemer

Question Box

Does the Nuclear Division hire persons past 50 years of age?

Hiring practices

QUESTION: Does the Nuclear Division hire persons over the age of 50? Does the company give special consideration for hiring spouses of deceased or retired former UCC-ND employees?

ANSWER: We have employed many persons over the age of 50 and will continue to do so when there is a match between job requirements and job skills. An individual's capability to effectively perform the job which is open is the principal consideration in connection with the hiring decision. Spouses of deceased employees and former employees who have retired are given consideration along with other candidates when vacancies exist for jobs for which they are qualified.

Pay rate differences

QUESTION: I recently sent a question to the Question Box concerning differences in pay practices between hourly and salaried employees. Why hasn't the question been answered?

ANSWER: There are many differences in personnel practices and in pay practices between hourly and salaried employees. Practices concerning salaried employees are determined by the Company, whereas practices covering hourly employees are subject to negotiation with the union representing the employees involved. It is not the purpose of this column to get involved in matters that are subject to negotiation with our various unions.

Insurance rates

QUESTION: I am no authority on insurance rates, but it seems strange that my basic insurance costs less than the supplemental when the supplemental insurance gives me only half the coverage basic does. Is there a reason for this?

ANSWER: The Company and the employees share the cost for the basic insurance which is provided to employees on a voluntary enrollment basis. Each employee, however, pays the full premium cost for the supplemental insurance. Older employees pay higher premiums for supplemental insurance than younger employees to reflect the higher risk involved. On this basis, employees who are 55 years of age or older pay more per $1000 of life insurance for their supplemental coverage than they do for basic insurance.

Jury duty

QUESTION: My supervisor insists that I return to work when I have been serving on jury duty that does not require a full day. I know of many other employees who do not return to work. What is company policy regarding this?

ANSWER: Any employee who is released from jury service in time to report to work and perform work for one-half day is expected to do so. Individuals who report to the courts for service are usually either selected as a juror on a particular case or released for the day. Those individuals who are released from jury service for the day usually have adequate time to return to work and are expected to do so.

Next issue. . .

The next issue will be dated June 26. The deadline is June 18.

Save Energy/Share The Ride

ORNL

RIDERS for VAN POOL from Norris Freeway, Clinton and Claxton to East, North and West Portals, 8-4:30. Herman Smith, plant phone 4-4134; home phone 992-0331 (Maynardville).

CAR POOL MEMBERS from Lakeridge/Terre Verde/Bunker Hill area of Concord to any portal, 8-4:30. H. M. Porter, plant phone 6-7643 or 4-5321; home phone 966-7455.

RIDE WANTED or JOIN CAR POOL from W. Vanderbilt Drive, Garden Apartment area, Oak Ridge, to East Portal, 8-4:30. L. W. Gilley, plant phone 4-5851, home 482-6890.

RIDERS for BUS POOL from Middlebrook Pike area of Cedar Bluff, West Knoxville (including stops at Middlebrook Pike United Methodist and Mars Hill Baptist churches and other areas of Cedar Bluff), to all portals, 8-4:30. Ray or Vic Claiborne, 693-1168.

CAR POOL FORMING from Marlow/Oak Ridge. Will pick up riders near New York and Lafayette Avenues, 8:15-4:45, any portal. Dick Roop, plant phone 4-7305; home phone 435-1226.

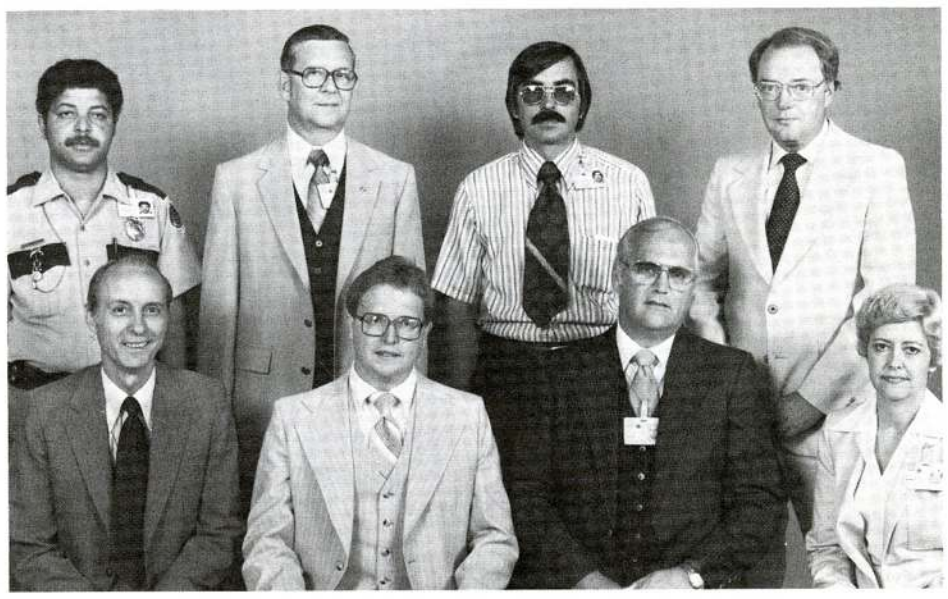
Y-12

WANTED RIDERS for BUS POOL from Alcoa, East Knoxville to East or North Portals, 8-4:30. W. C. Carter, plant extension 4-0110, home phone Knoxville 525-2365.

ORGDP

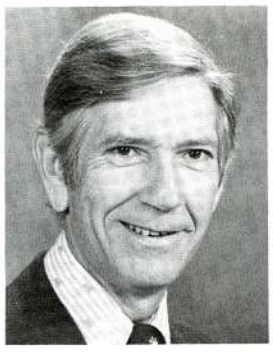
BUS RIDERS from Rockwood to Portals 2, 4, 7, 8, 9 and 5. R. K. Hull, plant phone 6-0204, home phone Harriman 882-5618.

RIDERS from South Knoxville, via Merchants Road, Clinton Highway and Karns, to any portal, D shift. John Ross, plant phone 4-9321, home phone Knoxville 577-0692.

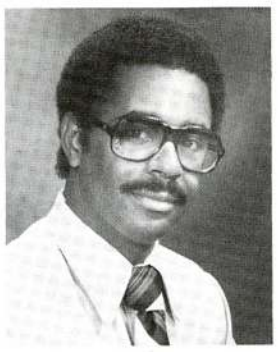


UNITED WAY COMMITTEE—Planning and organizational efforts are under way for the United Way campaign in Y-12. Seated from left are William H. Dodson, chairman; Dan G. Ailey, assistant treasurer; Harry L. Bailey, assistant chairman; and Louise Egner, assistant to the chairman. Standing are John Davidson, standing in for R. L. Truitt, associate chairman representing the International Guard United of America; Loyd Sheffield, campaign materials; J. F. Watlington, treasurer; and Malcolm L. Shell, publicity. Not present were C. E. Robinson, O.L. Williams and W. T. Calhoun, associate chairmen representing the Atomic Trades and Labor Council; and Jeanne Moody, solicitor training.

Garren



Green



Jackson

Scott

Smith

Webb

Six promoted in Maintenance

Six planner-estimators have been named in Y-12's Maintenance Division: Donald G. Garren, Charles C. Green, Olvin Jackson, George R. Scott, Bernard C. Smith and Ted L. Webb.

Garren, a native of Knox County, attended the Tennessee Institute of Electronics before joining Union Carbide in 1976. He also worked for the Tennessee Scale and Supply Company.

Married to the former Carolyn Chesney, he lives at 1945 Cecil Johnson Road, Knoxville. The couple has two children, Paul and Donald Dwayne.

Green was born in Madisonville and worked in real estate and served in the Air Force and Navy before coming to Y-12 in 1977. He is attending the University of Tennessee.

Mrs. Green is the former Eleanor Chumard. They have five children, Alicia Marshall, Alegra, Theresa, Kelli and James Green, and live at 714 Riverbend Road, Clinton.

Jackson was born in Martinsville, Va., and attended Danville (Va.) College. He worked as an assistant engineer and radio announcer for WILA, Danville, before joining Union Carbide in 1978.

He lives at 6616 Trousdale Road, Knoxville.

Scott joined Union Carbide in 1978, after working with Southern Telephone Service and serving in the Air Force. A native of Greeleyville, S.C., he is studying for an AA degree in communication technology.

Mrs. Scott is the former Marguerite Mewborn, and they live at 9913 Joy Lane, Oak Ridge. They have three sons, Richard, Walter and Erik.

Smith was born in Canandaigua, N.Y. and spent nine years in the Navy. He also worked with the Smith Cabinet Company before joining Union Carbide in 1978.

He and his wife, the former Treva Arney, live at 109 Wilder Street, Rockwood. They have a son, Greg.

Webb, a native of Maryville, is currently attending the University of Tennessee. He retired from the Navy in 1977, worked briefly at Robertshaw Controls Company and joined Union Carbide in 1978.

His wife is the former Barbara Bowman, and they live at 224 Engert Road, Knoxville. They have two sons, Michael and David.

Organization changes affect ORGDP's Maintenance Division

A. A. "Tony" Dean, superintendent of ORGDP Maintenance, has announced the following organization changes: James E. Heiskell has been named superintendent of Field Maintenance; Joseph C. Hall has assumed responsibilities as superintendent of Plant Services; and Larry D. Owens has been promoted to superintendent of Maintenance Engineering.

Heiskell, who joined Union Carbide in 1969, has served as superintendent of Plant Services and has also worked in other Maintenance groups. A native of Sweetwater, he has a BS in industrial technology from Tennessee Technology University. He and his wife, Linda, live in Kingston with their two children, Gwynne and Russell.

Hall was born in Fort Towson, Okla., and received his BS in mechanical engineering from Oklahoma State University. He has been Maintenance Shops and Maintenance Engineering superintendent. He is immediate past president of the Society of Manufacturing Engineers.

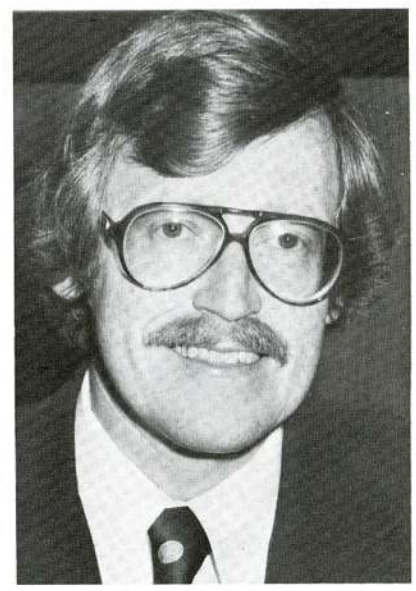
Mrs. Hall is the former Jere Hogue. The couple lives in Kingston and has two children, Andrea and James.

Owens, a native of Huntsville, Ala., received a BS in industrial engineering from Auburn University and an MS from the University of Tennessee. He has also done graduate work in industrial management at UT. After serving in the U. S. Navy, Owens joined Union Carbide in 1969 as an engineer at the Y-12 Plant. He most recently served as supervisor of Industrial Engineering in ORGDP's Maintenance Division.

Mrs. Owens is the former Nancy Clough, who is employed in the Enrichment Technology Division at ORGDP. They live in Clinton with their son, Mike.

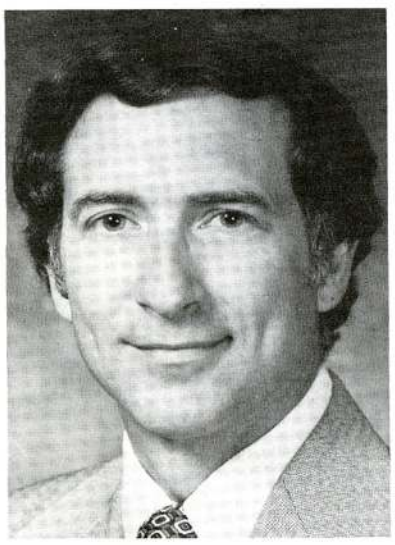
James E. Heiskell

Joseph C. Hall



Larry D. Owens

Smith named new engineering manager



Carl B. Smith

Carl B. Smith, Nuclear Division Engineering, has been appointed engineering manager for the fossil energy program at ORNL.

Smith will coordinate all fossil energy work performed within the Engineering organization. He joined Carbide in 1974 as a member of ORNL's experimental engineering department, where he was responsible for the mechanical design of experimental equipment for nuclear and fossil energy development.

He recently completed an assignment as manager of Nuclear Division activities supporting the "atmospheric fluidized bed combustion/component test and integration unit" for DOE's Energy Technology Center at Morgantown, W. Va.

Smith received bachelor's and master's degrees from Auburn University. Before joining Carbide, he was employed by General Dynamics in Fort Worth, Tex.

He and his wife, Sandra Russell Smith, live at 441 Ferret Road, Knoxville. They have four children, Dan, Lisa, Scott and Christian.

Energy-saving tip

Use fluorescent lighting wherever you can for more lumens per watt. A 40-watt fluorescent lamp gives off 80 lumens per watt, and a 60-watt incandescent bulb gives off only 14.7 lumens per watt. The 40-watt fluorescent lamp would save about 140 watt-hours of electricity over a seven-hour period.

Volcano visited, analyzed by Division staff

Since the big eruption at Mount St. Helens on May 18, there has been much publicity about volcanic ash and the "ash clouds" that are drifting across the country.

Realizing that this is yet another form of air pollution, many people are wondering what kinds of elements are contained in the material and about their possible health effects.

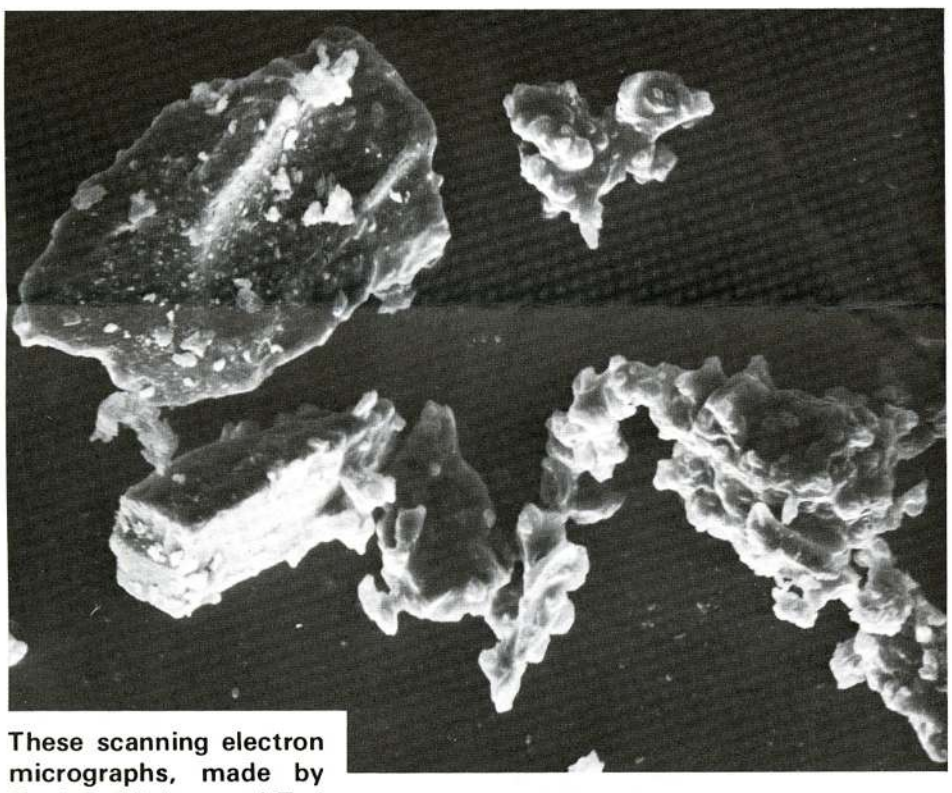
Using X-ray fluorescence, activation analysis, and other techniques, staff of the ORNL Analytical Chemistry Division have analyzed about 200 grams of the ash from Washington and determined its contents. Some of the major elements found were aluminum, iron, silicon, sodium, magnesium and calcium. "Basically, it has some of the same elements found in ordinary rock," said Tom Oakes, ORNL environmental coordinator.

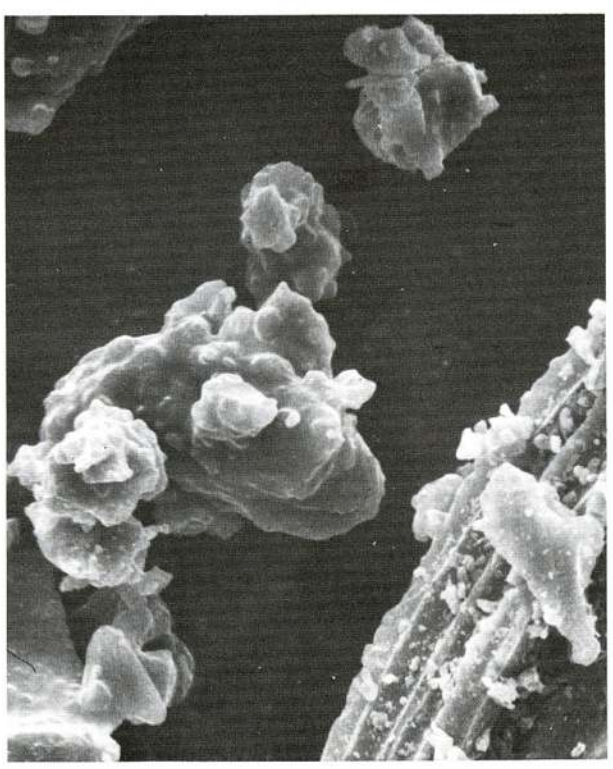
Small amounts of radioactivity in the material resulted from the naturally occurring radioelements—thorium, uranium and potassium. The concentration of these elements is similar to that found in other volcanic rock types.

According to the National Disease Control Center (NDCC) in Atlanta, the element of primary concern, from a health standpoint, is silicon which, if inhaled can cause silicosiderosis, a respiratory disease.

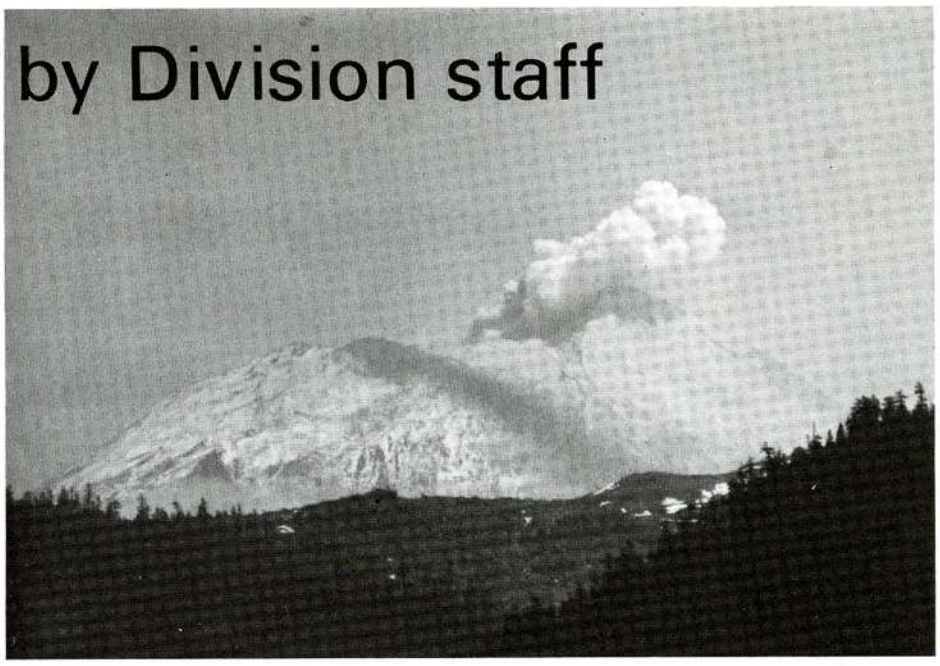
This is not likely to be a problem, however, since the observed particle sizes are much greater than one micrometer, and the body has very efficient mechanisms for rejecting large particles of this size. Data from the ORNL analyses will be provided to NDCC.

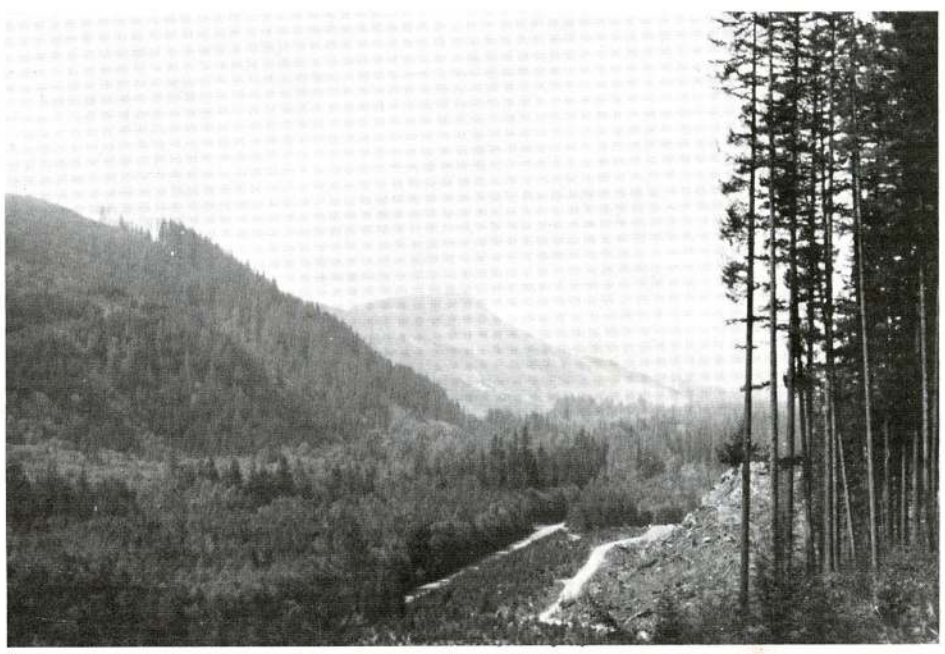
In addition to the samples of ash, Oakes' staff is keeping close watch at ORNL air monitoring stations and is investigating isolated cases of cars being covered with unusual-looking dust. So far the monitors indicate no increase in the amount of particulate matter in this area.





These scanning electron micrographs, made by Reuben Melton and Ted Nolan of the Materials and Chemistry Technology Department in ORGDP's Enrichment Technology Division, are a close-up look at particles of volcanic ash from the May 18 Mount St. Helens eruption. Judy Kibbe of ORNL's Engineering Technology Division brought this particular ash sample back from Billings, Mont., about 650 miles from the volcano, where she collected it two days after the eruption. The top photo shows the particles—which are about half the diameter of a human hair—enlarged 1,500 times; the photo at right, 3,000 times.





Mount St. Helens began spewing molten ash (top photo) as Wes Robinson and Joe Rich watched on May 11, exactly one week before its mighty eruption. Robinson and Rich, both members of ORNL's Information Division, observed from their vantage point just nine miles away as the volcano vented steam and ash. By the time they completed their four-hour vigil, Mount St. Helens was venting almost continuously (center photo). The peaceful valley below is now covered with three feet of mud and ash, Robinson said.

(Photos courtesy of Wes Robinson)

May golf tournaments...

ORNL—Cedar Hills

ORNL's May golf tournament, held at Cedar Hills, went to R. Barker with a 73; followed by P. Pair, 74. Handicap lows were registered by J. Bridges, 76; J. Hudson and J. Warren, each with 77.

W. Burch's 76 was low in the second flight. He was followed by J. Deatherage, 77. W. Paul's 78 was handicap low; and R. Ross and W. Davis tied for second place with 83 each.

W. Evan's 82 was low in the third flight. He was followed by O. Rogers, 87. E. Hensley's 83 was handicap low; followed by C. Lamaster, 90.

Winners may pick up their golf balls in room J-104, Debbie Walker, Building 4500N.

Y-12—Dead Horse Lake

John Hamilton scored an even par to take the Dead Horse Lake golf tournament for Y-12ers for May. He was followed by Jim George and H. E. Smith, both with 76's.

Fred Hammond's 80 was low handicap score; Lanny Duke followed with 79.

In the second flight it was Jimmy Ray Smith with 77; W. V. Williams with 86. Jack Woodall's 84 was low handicap score; Tommy Webber carded an 87, tied with Walter Wolfe.

The third flight went to Bill Jago, with 87; H. G. Dyer, 93. In handicap scoring, it was Chris Boyd, 88; and Ron LaPan, 93.

Awards may be picked up at Building 9711-5, Recreation Office.

ORGDP—Southwest Point

Al Boatwright returned to the winning circle, taking ORGDP's golf competition at Southwest Point. His 73 was followed by E. T. Strunk's 76. Handicap lows were cared by Gene Bird, 80; R. K. Johnson and Russ Langley, 81 each.

John Battle's 75 was low in the second flight, followed by R. E. Housley, 83. Handicap laurels went to J. G. Chapman, 78; and Phil Wallace and Bruce Vaught, each with 84.

Lee Trowbridge and Joe Wolfe tied for flight three honors, each with 90. Harry Hayes followed with 91.

John Owen took handicap lows in the third flight, with a card of 99; followed by Christ Strange, 92; and L. J. Davis, 91.

Awards at ORGDP are at Room C-136, Peggy Collier, Building K-1001.

Tee-Off Time Application for

June 28, 1980

☐ **Y-12—Whittle Springs**
☐ **ORNL—Bays Mountains**
☐ **ORGDP—Cedar Hills**

Foursome will Ride
Yes ☐ No ☐

1. _____
2. _____
3. _____
4. _____ Leader

PHONE _____
BLDG. _____
TEE-TIME _____

Foursomes that ride carts will receive earlier time
COMPLETE AND RETURN TO THE Y-12 RECREATION OFFICE
BUILDING 9711-5, MS-001
Entries must be received prior to drawing on June 25, 1980

Tee-off times for all tournaments will be drawn on Wednesdays prior to each Saturday's tournament. Golfers are responsible for reserving their own carts by contacting the pro shop following drawing for tee-off times. The leader ONLY for each foursome should call the Recreation Office, 4-1597, after 3 p.m., Thursday for your time.

TOURNAMENT WINNERS—The fifth annual American Society for Nondestructive Testing golf tournament was recently played in Rockwood. The above team took first place trophies with a best-ball, five-under-par 67. From left are Tommy Webber, Perry Bullard, Roscoe Hicks and Royal Cline.

Carbide softball standings

The fair days of June bring plenty of action in the softball leagues. Many teams still have clean slates as the competition continues.

League standings follow:

Atomic League-North Division

Name	Won	Lost
Snakes	5	0
Shifters	5	1
Gashouse Gang	4	1
Bruins	4	2
Dynamics	4	3
B. T. Express	4	3
Blue Demons	3	2
Electric Bananas	2	3
Rangers	2	4
ESD Pits	2	4
War Hogs	1	4
A-Shifters	1	4
Critical Mess	0	6

Atomic League-South Division

Name	Won	Lost
Mama's Best	6	0
Mutagents	5	1
Thunderdogs	5	1
Prime Time Players	5	1
Magnum Force	3	2
Arties Army	3	3
Infra-Red Sox	3	3
Short Circuits	2	3
Bat-O-Matics	1	4
Ole Ruff & Ready Gang	0	5
The Starters	0	5
Innovators	0	5

Carbon League-East Division

Name	Won	Lost
QA&I	5	0
K-Traitors	5	0
Sluggers	4	1
Bareskins	4	1
Fes-Kids	4	1
Ringers	3	2
Superstar's	3	2
Crippled Turkeys	3	2
Streakers	3	2
Knockers	2	3
Pirates	2	3
Killer Bees	1	4
Coneheads	1	4
Bear Creek All Stars	0	5
Wizards	0	5
Tom's Turkeys	0	5

Carbon League-Central Division

Name	Won	Lost
Luda Loptas	7	0
Master Batters	6	1
More Knockers	5	1
Fed II	5	2
Wild Turkeys	4	2
Uptowners	4	2
P.O.I.'s	4	2
Skinks	4	3
The Gauss House Gang	3	3
Pits	2	3
Pop-Ups	2	4
Fuzz Ballz	2	4
Our Gang	1	5
Fed I	1	6
Zilogs	0	5
The Argonauts	0	7

Carbon League-West Division

Name	Won	Lost
Sparks	6	0
Seven + Three	6	1
Bombers	5	2
Moneychangers	4	2
Stonefingers	4	3
Gordon's Golden Flakes	4	3
Odds and Ends	3	3
The Loose Balls	3	3
Whirlybirds	3	3
Super-Subs	3	4
"Tape" Worms	3	4
Bits and Pieces	3	4
Moxies	2	4
Rat House Gang	2	4
Rivets	1	5
Three Up Three Down	0	7

Swimming hours

Summer hours for swimming at the Clark Center Recreation Park are announced by the Nuclear Division's Recreation Department. Lifeguards are on duty from 10 a.m. until 9 p.m. daily, except Mondays, when the hours are from 1 to 9 p.m.

Swimming is not allowed when there are no lifeguards on duty.

Employee Relations schedules picnic

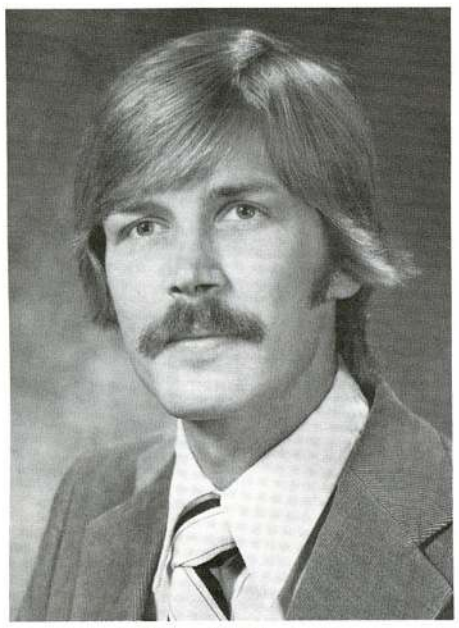
ORNL and ORGDP Employee Relations Divisions will hold a picnic on Saturday, June 28, at 1 p.m. at Clark Center Recreation Park.

For tickets, call Phil Parrett, 4-4405; Dana Jennings, 4-4404; Ann Farris, 4-4774; Bob Seyfried, 4-8599; or Ted Helms, 4-8622.

Fall league forming

The C Bowling League, the only league that allows for shift teams to bowl in the mornings, has openings for its fall season. If you are interested in forming a team or joining one, call John Patton, 4-9229; Dick Humber, 4-3652; or the Recreation Department, 4-1597.

Christian named assistant in Advanced Energy Systems



Jeffrey E. Christian

Jeffrey E. Christian has been named technical assistant to Murray W. Rosenthal, associate director for Advanced Energy Systems at ORNL. He succeeds John Moyers, who has completed a two-year assignment and is transferring to the Engineering Technology Division where he will help develop improved methods for the cleaning of coal.

In his new position Christian will assist in administering programs in fusion research and development and nonnuclear energy technologies. These include solar, geothermal and fossil energy alternatives, as well as energy conservation.

Christian, a native of Green Bay, Wisc., received a bachelor's degree in industrial engineering from the University of Wisconsin in 1974. He will receive his master's degree in environmental engineering from the University of Tennessee this month.

While attending college, Christian worked for the Wisconsin Department of Natural Resources and for Wisconsin Public Service (WPS) utility company. In the summer of 1973, he was responsible for preparing one of the first environmental impact statements for WPS on a 345-kilovolt transmission line.

Christian joined Union Carbide in 1974 and has been involved in several projects related to integrated urban energy facilities and solar total energy systems.

Christian serves as vice president of the Energy Conservation Society and is a member of the American Society of Heating, Refrigeration and Air Conditioning Engineers. He lives in Lenoir City, Tenn.

EMIC TECHNICAL INDEXERS include, from left, Mary Francis, Brad Whitfield, Elizabeth von Halle, Kathy Larsen, Director John Wassom and Bob Stafford.

Environmental Mutagen Society recognizes information center

ORNL's Environmental Mutagen Information Center (EMIC) is the recipient of the Environmental Mutagen Society's 1980 Environmental Mutagenesis Recognition Award.

The EMIC staff was recognized for "establishing an outstanding prototype informational service which has greatly facilitated research in the field of environmental mutagenesis." This is the first time the award has been given to a group rather than an individual.

EMIC, part of the Information Center Complex of ORNL's Information Division, was organized in 1969 in an effort to systematically catalog and make available all published data in the area of chemical mutagenesis. Worldwide genetic toxicology literature is collected and indexed, and the information is available to persons in research, government agencies and medical or educational institutions.

Staff members not pictured include Judy Adams, Wilma Barnard, Jean Bell, Mary Brown, Mary Ann Davidson, Roswitha Haas, Lily Huberman, Ida Miller, Kathy Miller, Beth Owens, Jimmie Taylor, Shigeko Uppuluri and Karen Weaver.

News About People

Ivan Sellin, ORNL Physics Division, has been appointed chairman of the National Academy of Sciences Committee on Atomic and Molecular Science. The group, made up of scientists from universities and research institutes, does studies and advises the government in areas of atomic and molecular science and in related areas of chemistry. He served on the committee from 1973 until 1976.

Sellin, who is a professor of physics at the University of Tennessee, is an invited lecturer to an international workshop in surface physics to be held at the Max Planck Institute near Munich, Germany.

Sellin

Shaughnessy

Holmes

James E. Shaughnessy and Randall L. Holmes of Paducah have been certified as welding inspectors by the American Welding Society.

Shaughnessy, a senior inspector, holds an associate degree in machine tool technology from Southern Illinois University and is a member of the American Society of Nondestructive Testing.

Holmes, an employee in the plant's quality Evaluation Department, is a member of the ASNT and the American Welding Society. He also serves as assistant chief of the Reidland-Farley Fire Department and vice president of the Reidland-Farley Khoury League.

Anniversaries

ORNL

35 YEARS

Ira T. Dudley, Engineering Technology; and Alex C. Tinley, Instrumentation and Controls.

30 YEARS

David R. Clark, Industrial Safety and Applied Health Physics; Pleas Mitchell, Plant and Equipment; and Raymond T. Woods, Finance and Materials.

25 YEARS

Stanley Cantor, Emory A. Davis Jr., C. S. Lisser, Leslie M. Ferris, Leslie H. Jenkins, Betty R. Diggs, James O. Scarbrough, Stephen J. Ditto Jr. and Larry K. Egner.

20 YEARS

Mary A. Combs, Charles E. Fowler Jr., Rex W. Ingle Jr., Gilbert A. Kelly and James A. Rhodes.

Y-12 PLANT

35 YEARS

Helen L. Hicks, Plant Laboratory; Harley R. Johnson, 9215 Rolling Mill; and Mary K. Mattingly, Plant Laboratory.

30 YEARS

Gerald W. Lankford, Product Engineering; Richard M. Chapman, General Machine Shops; Willie B. Kirk Jr., Process Maintenance; Idus D. Conner, Development Division; Billy L. Miller, Alpha Five East Shop; and William D. Newman Jr., General Can Fabrication Shop.

25 YEARS

Donald Branson, David H. Stephens Jr. and Ray F. Wilson.

20 YEARS

Frank G. Jinks and William R. Burrell.

ORGDP

35 YEARS

Joe F. Harvey, General Accounting; Frank Strange Jr., Plant Managers; Raymond Koteski, Operations; Robert Barnett, Operations; John Gutson, Maintenance; Crave Page, Operations; Richard Sullivan, Maintenance; Ernest Randolph, Operations; Cecil Parker, Barrier Manufacturing; William Stigall, Security and Plant Protection; Harvey Hands, Operations; and Willie Loveday, Barrier Manufacturing.

25 YEARS

Jack Zeigler and Janis Soard.

20 YEARS

Jennice Gardner, Leon Willien III, John McKeever and Morrison Masters.

Health tips for the summer months

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," **NUCLEAR DIVISION NEWS,** *Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)*

Warm weather brings many unique health problems. The following miscellaneous facts may seem obvious to most readers, yet emergency rooms and physicians' offices are filled each summer with "smart people" who "knew better."

Sun

It is probably useless to warn light-complexioned people about excess exposure to the sun. It is a part of the youth culture to worship the sun. To be deeply tanned is considered "macho" and "sexy" and is believed to represent the epitome of health. Dark-skinned individuals who have much less reason to be concerned about tanning generally "take it or leave it."

Sunburn can be very painful. The sun is at its most hazardous from 11 a.m. to 3 p.m. Remaining in the shade may not prevent sunburn, because sunlight is reflected from water, sand and other materials. It is easy to become sunburned on an overcast day, because one may receive up to 80 percent of the ultraviolet light present on a clear day. Almost 100 percent of the light is reflected from water when the sun is directly overhead. Reflected light can cause sunburn in areas that normally are lightly exposed and are not tanned.

Sunscreens are effective but should be applied an hour or more before going out in the sun. Those containing para-Aminobenzoic acid (PABA) or PABA esters probably stay on the skin longer and are more effective than other screening agents. PABA, however, may stain clothing yellow, and some people are allergic to it.

Sunlight makes flowers bloom and vegetables grow, but it does little for adult skin. Repeated and prolonged exposure leads to freckles, thickening, keratoses, wrinkling, "crows' feet" and premature aging. Caucasians of northern European ancestry are especially vulnerable to skin cancer, and most cases are preceded by many years' exposure to the sun.

Poison Ivy

There is no safe or satisfactory way to become desensitized to poison ivy. Oral preparations are used, but they must be taken for many months and often cause unpleasant side effects. Know the plant and avoid it assiduously! Washing thoroughly after possible exposure is essential but may be too late if a person is extremely sensitive. Remember that pets wander through poison ivy and may get milk sap on their fur. Your garden tools may also be contaminated. If you develop the blisters and rash, see your physician promptly. Steroid therapy is effective.

Ear infections

Infections in the ears (*otitis externa*) can often be avoided by having the ears washed out before the swimming season begins. Impacted wax traps water in the canal after swimming and frequently leads to infections. Swimmer's ear is rarely due to a fungus; it is a bacterial infection combined with a dermatitis.

Swimming after meals

There is no need to avoid swimming for one to two hours after a meal, as your grandmother may have warned you. However, a sensible person will not undertake long swims in deep water after a huge meal, especially if the meal has included beer or alcoholic beverages. Cramps, fortunately, are relatively rare. Most drownings are the result of panic, caused by fatigue. The swimmer has over-estimated his or her skill or strength and fears that the shore or boat cannot be reached. Even if you are an accomplished swimmer, never swim alone in deep water. Always check the depth of the water before diving. Many adolescents suffer broken necks in diving accidents every year.

Problems may also result when young people try to see how far they can swim under water. They often take many rapid deep breaths (hyperventilate) before they dive, hoping that this will enable them to hold their breaths longer. Occasionally, swimmers will faint while under water. Many strong, healthy swimmers have drowned as a consequence.

General

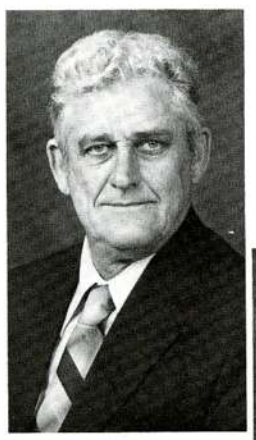
Don't forget the gray matter between your ears! It can be useful! Have a healthy, vigorous but safe summer.

Safety Scoreboard

Time worked without a lost-time accident through June 5:

Y-12 Plant	184 Days	6,424,000 Employee-Hours
Paducah	378 Days	4,079,000 Employee-Hours
ORGDP	122 Days	3,865,785 Employee-Hours

RECENT RETIREMENTS



Robert H. Hall
A-Wing, H2, F Area
Y-12
25 years service

Paul R. Shatley
Utilities
Y-12
13 years service

Woodrow R. Jackson
Guard Department
Y-12
26 years service

Coney F. Jenkins
Maintenance
Y-12
27 years service

Corporate world of Union Carbide

Plans to construct a technology laboratory for its Battery Products Division have been announced by Union Carbide Corporation. The multimillion dollar facility for battery research and development will be located in the Greater Cleveland, Ohio, metropolitan area. Completion is scheduled for 1983.

The new facility will include centralized laboratory and office functions and associated support services that are necessary to perform product and process research and development in support of Union Carbide's expanding worldwide battery business. Estimated size of the facility will be approximately 180,000 square feet.

Union Carbide is one of the world's leading and pioneer producers of dry cell batteries marketed under the well-known Eveready and Energizer trademarks.

UNION CARBIDE

UNION CARBIDE CORPORATION
NUCLEAR DIVISION
P.O. BOX Y, OAK RIDGE, TENNESSEE 37830

BULK RATE
U.S. Postage
PAID
Union Carbide Corporation

ADDRESS CORRECTION REQUESTED